

Tutanning survey

A recent survey of Tutanning Nature Reserve for woylies, tammars and possums has revealed that these species have increased under a fox control program. Woodvale senior research scientist Jack Kinnear and technical officer Mike Onus carried out the survey, which involved both spotlighting and trapping. Jack describes the background to the project and its findings.

By 1984 we had some strong evidence that rock-wallabies had increased in response to fox control. These findings encouraged us to repeat our fox control experiment in Tutanning which still carried tammars and possums, but their numbers were very low.

Woylies, bandicoots and ring-tail possums were common up until the early 1970s, but none had been sighted for more than 10 years.

Before we started fox control in 1984, we carried out some systematic spotlight surveys. Things looked pretty bad; on some nights all we saw were kangaroos and we never did sight a woylie.

Fortunately, after a lot of effort, we did have some success in trapping woylies.

Our trapping success rate was nil for most areas of the

by Jack Kinnear

reserve, but Mike managed to locate two areas where woylies were just hanging on.

After five years of fox control, we returned to assess the situation. We were naturally curious and anxious to learn if there had been any population increases.

On checking the traps for woylies, it soon became apparent that the woylies had increased dramatically. In 1984 we managed to catch only seven woylies, but this time we caught 64 for almost the same effort. Indeed, the very first night yielded more woylies than the 1984 total!

What was most pleasing, apart from the increases, was the finding that fox control had enabled the woylie to establish itself in areas of the reserve where it had died out.

Woylies had managed to survive in low numbers in thickets of poison bush and from these areas they have spread out to re-populate the reserve.

Spotlighting is not the most reliable method for censusing animal populations, but even this method yielded reasonably conclusive results.

For example, in 1984 we caught seven woylies and sighted none; in 1989 we caught 64, sighted 15.

For tammars and possums, we carried out seven surveys prior to fox control, and sighted five tammars and five possums. This year we carried out eight surveys and sighted 54 tammars and 60 possums!

There is still a long way to go as these three species have not fully recovered to the levels of 1970.

Tutanning is a fairly large reserve and it will take a while for it to fill. If fox control is maintained, and if the seasons remain reasonable, we can expect further increases and more sightings.

Up to this point, firm evidence regarding fox predation was restricted to rock-wallabies and numbats.

With these latest results from Tutanning, the list of threatened species is now five and it seems reasonable to infer that other species are at risk as well — how many we do not yet know.

I should think that there is now little room left for skepticism regarding the fox threat. If we do not bring the fox under control, then I believe our reserve system will end up supporting only grey kangaroos and the very small marsupials.